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(56) Documents cited

GB 2180214 A

GB 0964542 A

GB 0810531 A

GB 0796499 A

EP 0200220 A2

EP 0179641 A2

EP 0071365 A2

WO 83/00430 A1

US 4397879 A

(58) Field of search

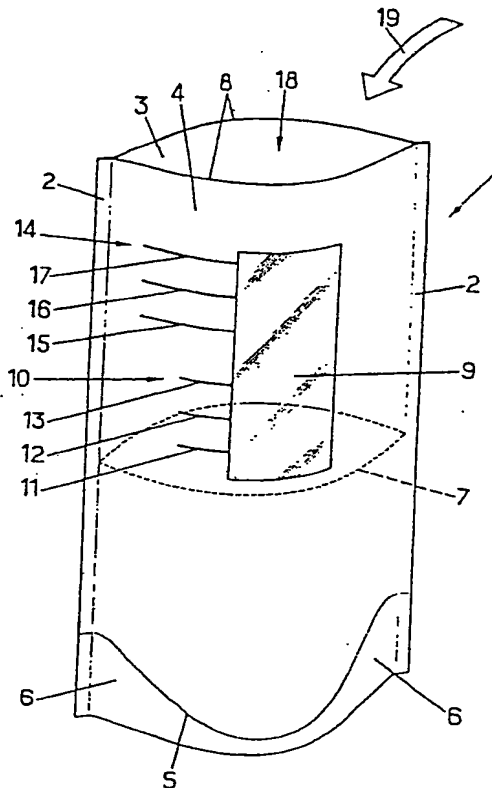
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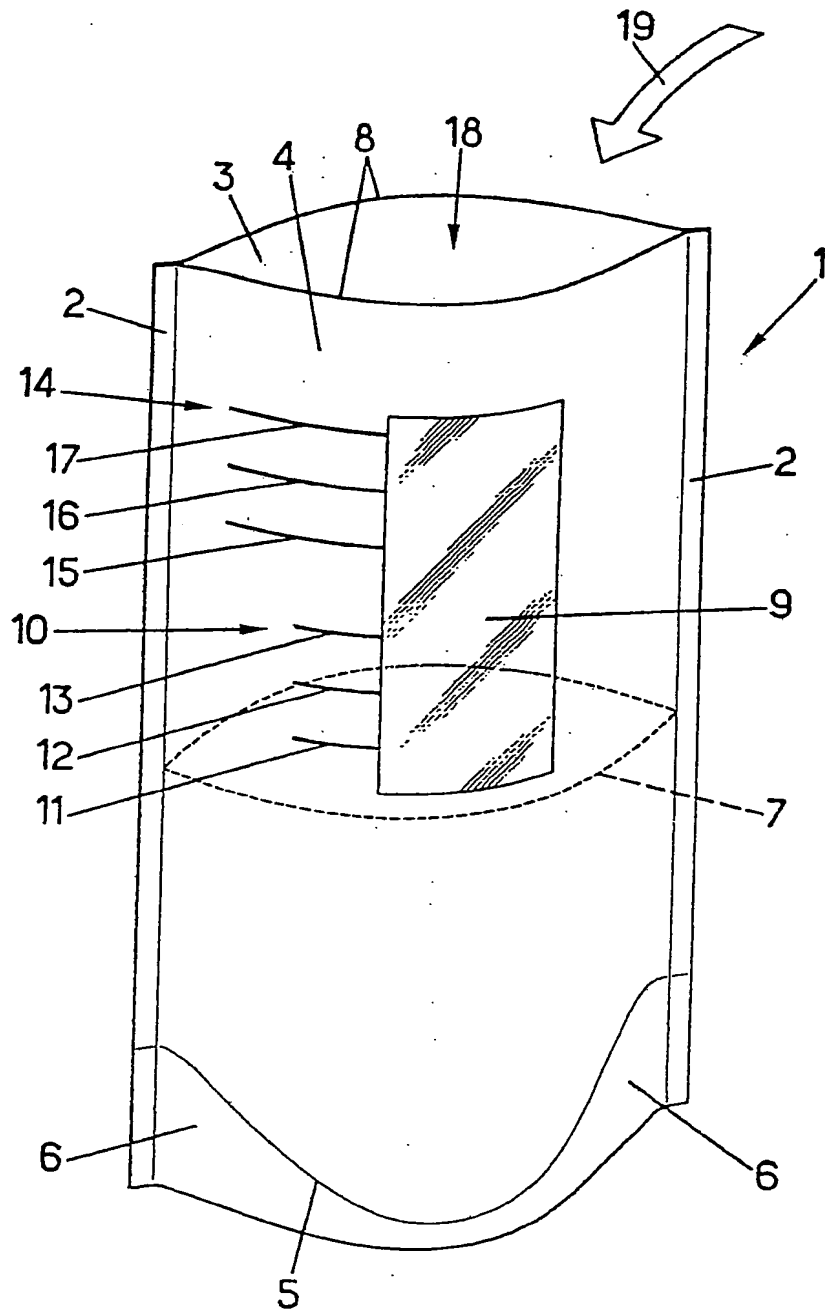
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(54) Package containing concentrated egg products

(57) Air-tight package containing a whole-egg, white-of-egg or egg-yolk based, concentrated egg product of a pasty consistency, further comprising salt and/or sugar and capable of containing other food ingredients or flavours, needing water added to it before use, in the form of a flexible pocket (1) defining a base upon which the package can stand upright and initially closed lips (8) on the upper part, characterised in that at least one portion (9) of the package is translucent and has graduations (10, 14) extending above the product level (7) in the package, and in that the total volume of the package is chosen so that it can contain the final preparation after an appropriate amount of water is mixed with the product. A first graduation (10) has different levels 11-13 so that water can be added in stages to aid homogenisation; and a second graduation (14) has different levels (15-17) for determining the final volume according to taste.





## PACKAGE FOR CONCENTRATED EGG PRODUCTS

The subject matter of the present invention is an air-tight package suitable for concentrated egg products of a pasty consistency, which is in the form of a flexible pocket.

Concentrated egg products, and their method of preparation, have been described in European Patent No. 51 757 (LIOT). These products, which are of a highly-concentrated pasty consistency, comprise whole egg or just white of egg or egg yolk with salt and/or sugar added. They can also contain other ingredients or food flavours. The products are prepared by an original process which permits excellent characteristics of preservation and texture to be ensured in the products obtained. For using these products, for example for producing culinary preparations such as Dauphine potatoes, sauces, soufflés, choux pastry, omelettes etc., it is advisable to add a certain amount of water to the pasty products and to carry out a mixing which is suitable for homogenising the whole.

Until now, packaging these concentrated egg products of a pasty consistency has been carried out conventionally in rigid packages, for example in metal canisters. When they are to be used, a certain, specified amount of the product is poured into an appropriate receptacle and the volume of water necessary for obtaining the reconstituted egg product for a culinary use is mixed in.

However, this type of packaging has not proved entirely satisfactory in practice. Indeed, it can be seen that it is necessary to carry out a decanting of the product into a receptacle which will permit mixing. The result of this is a loss of a part of the concentrated product, which cannot be used. Moreover,

sometimes problems are noted concerning homogenisation at the time of mixing, and variations in the quality of the final product, due to a certain lack of precision in the volume of water used for the dilution. These problems are particularly present when the concentrated egg product has to be packaged in individual packaging intended for use by the general public. In fact, in this case the user who is not an expert has difficulty in measuring out the correct amount of water for mixing and thus does not obtain a satisfactory result or one which can be perfectly reproduced.

The object of the invention is to solve these problems and to define a package which permits the user to carry out a precise mixing, in particular in the case of an individual package containing a small amount of concentrated product, thus ensuring that the result can be reproduced perfectly, using all of the product contained in the package.

The object of the invention is also a package of this type which permits the dilution of the product to be varied in specified proportions according to the final taste desired by the user.

The object of the invention is also a package capable of containing the product after mixing and capable of being moved easily and handled without risk of overflowing.

The air-tight package according to the invention is suitable for whole-egg, white-of-egg or egg-yolk based, concentrated egg products of a pasty consistency further comprising salt and/or sugar and capable of containing other ingredients or food flavours, the product needing water added to it before use. The package according to the invention is in the form of a flexible pocket comprising a base upon which the package can stand upright and closing lips on the upper part. According to the invention, the package

comprises at least one translucent portion and has graduations extending above the level of the product. The total volume of the package is chosen so that it can contain the final preparation after mixing an appropriate amount of water with the product.

In an advantageous embodiment, the package comprises a first graduation provided with different levels for making the homogenisation of the mixture easier by progressively adding water within the package.

The package preferably comprises a second graduation provided with different levels for determining the final volume of the preparation according to the taste desired by the user.

The package preferably comprises a base made up of a cylindrical portion re-inforced by a rigid annular element, permitting the package to stand upright.

The invention will be better understood by studying the detailed description of a non-restrictive example of a package according to the invention illustrated by the attached drawing.

In the single figure of the drawing, a package according to the invention is represented. The package in its entirety is in the form of a flexible pocket 1 produced by a weld seam along the two vertical edges 2 of two thin flexible sheets 3 and 4. Each of these sheets 3, 4 can advantageously be made up of a lamination of several thicknesses comprising a layer of aluminium, an inner layer of plastics material such as high-density polyethylene and an outer layer of plastics material such as high-density polyethylene. For more information, reference can be made for example to French Patent No. 2 311 730 (SCAL) which describes a semi-rigid package of this type. The base of the pocket is welded along line 5 to the two sheets 3 and 4, thus ensuring perfect air-tightness. The

approximately triangular annular region situated between the cylindrical upper part of the package and the truncated-shaped base is indicated with 6. This annular region is advantageously stiffened for example by means of ribs obtained by stamping or by the introduction of an intermediate layer of thermoplastic foam. In this way, the entire package is able to stand upright as illustrated in the figure, and the durability of the connection between the base and the two sheets 3 and 4 is increased.

Further, in the figure, the level of the concentrated egg product 7 can be seen which fills a little less than half the capacity of the package. It will be understood that, after filling, the upper lips 8 of the sheets 3 and 4 are closed and welded in air-tight manner so that preservation of the product in the package is ensured.

The sheet 4, which is towards the front in the figure, comprises a translucent window 9 of a general rectangular shape which is elongated vertically. Arranged on one side of the window 9 are two graduations. The lower graduation 10 defines, in the example illustrated, three levels or marks 11, 12 and 13. The second graduation or upper graduation 14 also defines in turn three levels or marks 15, 16 and 17. Each of the marks of this graduation extends horizontally on the sheet 4, being visible on the outside up to the edge of the window 9.

When the user wishes to put the egg concentrate product inside the package to use, he first opens the upper part of the package by tearing or cutting off the weld seam on the upper edge 8. He can then pour water through the opening aperture 18 thus formed, according to the arrow 19, into the pocket 1, which is kept upright on its rigid base. Filling with diluting water takes place up to the first mark 11 of the lower

graduation 10. The user is then asked to mix correctly the water thus added with the pasty product 7 which is in the pocket 1. It will be understood that, in the course of this operation, which can be carried out for example with a wooden spoon or fork, all of the egg product is effectively mixed with the diluting water with any loss, this mixing taking place directly within the package. After correct homogenisation, the user can continue the diluting operation by adding more water up to the level of the second mark 12. He then stirs the mixture until perfect homogenisation is achieved, before recommencing the same operations up to the level 13 of the lower graduation 10.

For the final mixing which permits, by an extra addition of diluting water, the product to be obtained which can be used directly for a culinary preparation, it is necessary to add water up to the level of one of the marks of the upper graduation 14, and then to stir in order to homogenise the whole.

The package containing the product after mixing can remain upright thanks to the shape of its base and can be moved and handled easily without risk of overflowing.

Thanks to these successive additions of liquid, it becomes possible to obtain a perfectly homogenised product, and to use the whole of the product contained in the package. The user is guided in these operations in a precise fashion, thanks to the existence of the graduations 10 and 14 together with the translucent window 9 which allows him to control exactly the amount of diluting water measured out.

Depending on whether the user wishes to obtain a product having a strong taste or on the other hand a more delicate taste, he will use one or another of the three marks 15, 16 and 17 of the upper graduation 14. Thus it is for example that, in the case of a sweet egg

product, using the lower mark 15 will allow a very sweet culinary preparation to be obtained. On the other hand, using the upper mark 17 will allow a less sweet final preparation to be obtained. In the same way, the user will be able to vary the taste of the culinary preparation in a precise way, thanks to the existence of the different marks on the upper graduation 14 in the case of the product containing food flavours other than sugar.

Once the preparation has been thus diluted and perfectly homogenised directly in the flexible pocket 1, it is simple for the user to pour the mixture directly into the mould or the pan, for cooking the preparation alone or mixed with other ingredients. The invention will have allowed a precise, perfect mixing of the product with the diluting water to be carried out, will have allowed the whole of the product in the package to be used and, lastly, will have allowed the taste of the final product to be varied in a precise way which can also be reproduced.

Thanks to the package according to the invention, it becomes possible therefore for the user to put into use, in a simple fashion and without any additional measuring or weighing, a concentrated egg product of a pasty consistency previously preserved in an air-tight package.



Claims

1. Air-tight package for a whole-egg, white-of-egg or egg-yolk based, concentrated egg product of a pasty consistency, further comprising salt and/or sugar and capable of containing other food ingredients or  
5 flavours, needing water added to it before use, in the form of a pocket defining a base upon which the package can stand upright and closable lips on the upper part, characterised in that at least one portion  
10 of the package is translucent and has graduations extending to above the level of the product, the said graduations comprising a first graduation with different levels to make the  
homogenisation of the mixture easier by adding water  
15 progressively within the package, and a second graduation with different levels for determining the final volume of the preparation according to the taste desired; and that the total volume of the packet is chosen so that it can contain  
20 the final preparation after an appropriate amount of water is mixed with the product, the package containing the final preparation being capable of being moved and handled without risk of overflowing.

2. Package according to the preceding claim,  
25 characterised in that it comprises flexible walls and a floor which is re-inforced by a rigid annular element

3. A package substantially as hereinbefore described with reference to the accompanying drawing.